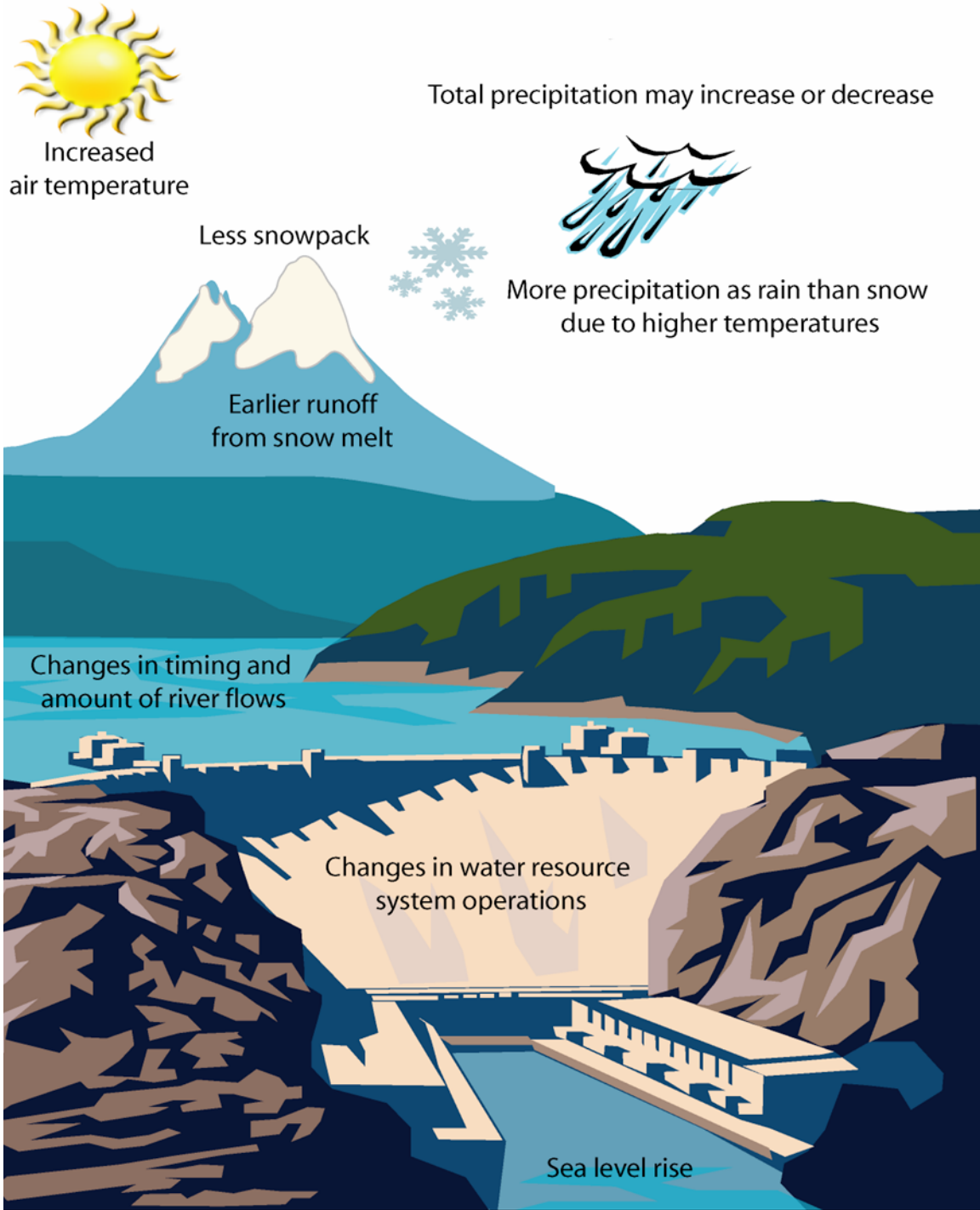


# Adapting for Climate Change

## California Water Resources Management

July 31, 2008  
Mark Cowin  
California Department of Water Resources



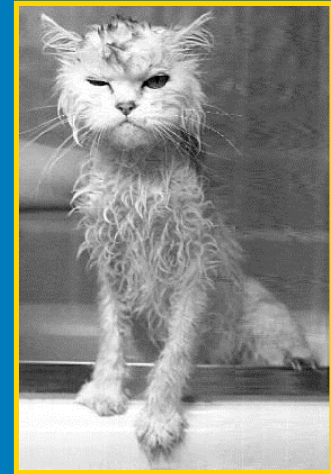
# Climate Change Impacts to Water Resources

- Diminishing snowpack
- More extreme weather patterns
- Rising sea level
- Higher air/water temperatures affecting ecosystem health

# Governor's Climate Action Team

## Water-Energy Subgroup (WET CAT) GHG Reduction Strategies

- Water Conservation
- Water Recycling
- Urban Water Reuse
- Energy Intensity of Water Systems
- Renewable Energy Production



# Comprehensive Strategy for Adaptation

## Regional Management Strategies

- Fully implement Integrated Regional Water Management
- Aggressively increase water conservation



## Statewide Management Strategies

- Coordinate existing water and flood management systems
- Improve management of surface and groundwater storage



# Comprehensive Strategy for Adaptation

## Improving Management and Decision-Making Capacity

- Learn from the past
  - Expand observation networks and data sets
- Provide information at the regional and watershed scale
  - Determine values for relevant parameters at regional or watershed levels
- Assess risk of extreme events
  - Evaluate potential changes in likelihood, magnitude and duration of floods and droughts
- Evaluate impacts of sea level rise
  - Determine rates, assess impacts, and develop appropriate mitigation
- Explore adaptation strategies
  - Examine flexibility of existing system and ways to adapt to changing climate conditions

# Comprehensive Strategy for Adaptation

## Investment Strategies

- Fund data collection and research needs
- Provide sustainable funding for statewide and regional integrated water management





# Advancing California Water Policy and Adapting to Climate Change

## **Complex Issues:**

- Water Rights
- Institutional Authority
- Physical and Biological Systems

## **Policies to Implement Solutions:**

- Move forward from where we are today
- Promote better informed resources management decisions
- Provide incentive for long-term, sustainable investment
- Govern and regulate equitably